

Jay Bennett
Executive Director-
Federal Regulatory

SBC Telecommunications, Inc.
1401 I Street, N.W., Suite 1100
Washington D.C. 20005
Phone 202 326-8889
Fax 202 408-4801



November 14, 2002

Via Electronic Submission

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
TW-A325-Lobby
Washington, D.C. 20554

RE: **Memorandum of Ex Parte Communication**

CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers

CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

CC Docket No. 98-147, Deployment of Wireline Services Offering Advanced Telecommunications Capability

Dear Ms. Dortch:

On November 13, 2002, SBC representatives met with Christopher Libertelli, Chairman Powell's Legal Advisor regarding the network impacts of combining UNE loops with special access transport. Participating on behalf of SBC were Chris Rice (Senior Vice President – Network Planning and Engineering), Andre Fuetsch (Vice President- Network Planning), Jim Smith (Senior Vice President - FCC) and Gary Phillips (General Attorney and Assistant General Counsel).

SBC explained that the provisioning of unbundled voice grade DS0 loops combined with special access transport should be implemented pursuant to rational network engineering concepts. Specifically, SBC described why it is reasonable, efficient and practical for CLECs to purchase loop concentration equipment for use in their network. However, if an ILEC should deploy new equipment to support UNE-L/SA, then the ILEC should be able to recover costs up-front. The attached materials were distributed during the meeting.

We are submitting the original and one copy of this Memorandum to the Secretary in accordance with Section 1.12 of the Commission's rules. Please include a copy of this submission in the record of the above-listed proceedings. Also, please stamp and return the provided copy to confirm your receipt. You may contact me at (202) 326-8889 should you have any questions.

Sincerely,

/s/ Jay Bennett

Attachment

CC: C. Libertelli



UNE-Loop/Special Access Network Impact Overview

November 13, 2002

Overview

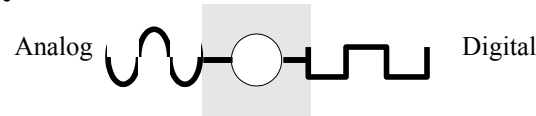
- **Provisioning of unbundled voice grade DS0 loops combined with special access transport should be implemented pursuant to rational network engineering concepts.**
- **There are costly, uneconomic ways to provision DS0 UNE loops combined with special access and there are rationale and efficient means to do so.**
- **SBC's presentation will discuss fundamental concepts involved in building efficient networks and will provide the Commission with workable alternatives for CLECs providing service utilizing their own equipment.**

Fundamental Concepts

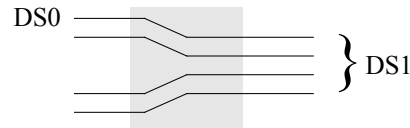
- **Distances and number of lines served within a central office are variable factors in the building of efficient voice networks.**
- **Efficient voice networks employ concentration and multiplexing as close to the end-user as economically feasible.**
- **CLEC collocation in ILEC central offices provides the opportunity for CLECs to build efficient and economic facility-based networks with equal access to UNE Loops.**
- **Alternative forms of loop access considered by the Commission should recognize these elements and provide the industry with incentives to invest and build efficient networks.**

Network Fundamentals

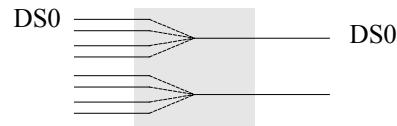
- ***A/D Conversion:*** The mass market is served by analog phone sets. Most switches are digital. Therefore, a conversion from analog to digital is necessary.



- ***Multiplexing:*** Allows multiple signals to be aggregated and transported across a single copper or fiber facility.

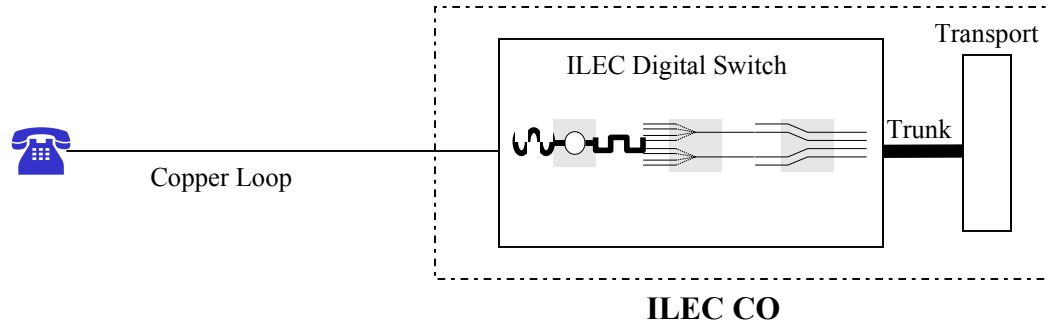


- ***Concentration:*** Allows “over-subscription” on either analog or multiplexed circuits. It is different from multiplexing. Different technologies allow different forms of over-subscription.

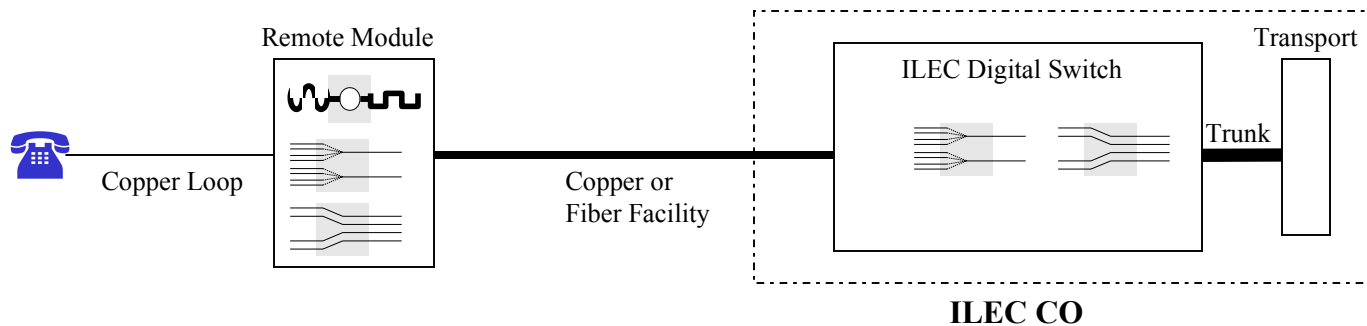


Distances and the number of lines served within a central office are variable factors in building efficient voice networks.

Loops 18Kft or less: A/D conversion, concentration and multiplexing performed by switch:

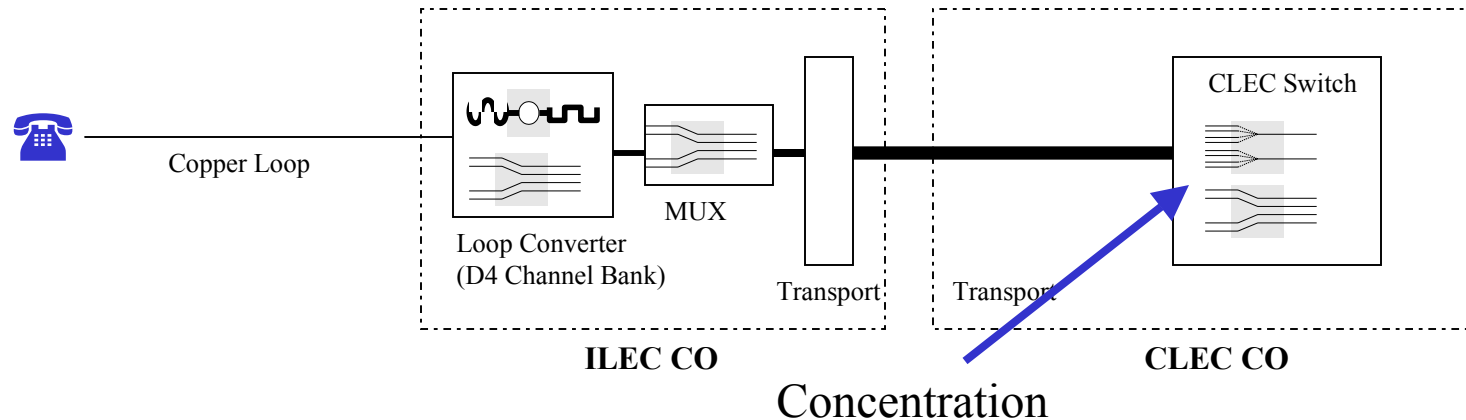


Longer loops require placing A/D conversion, concentration and multiplexing closer to the end-user:

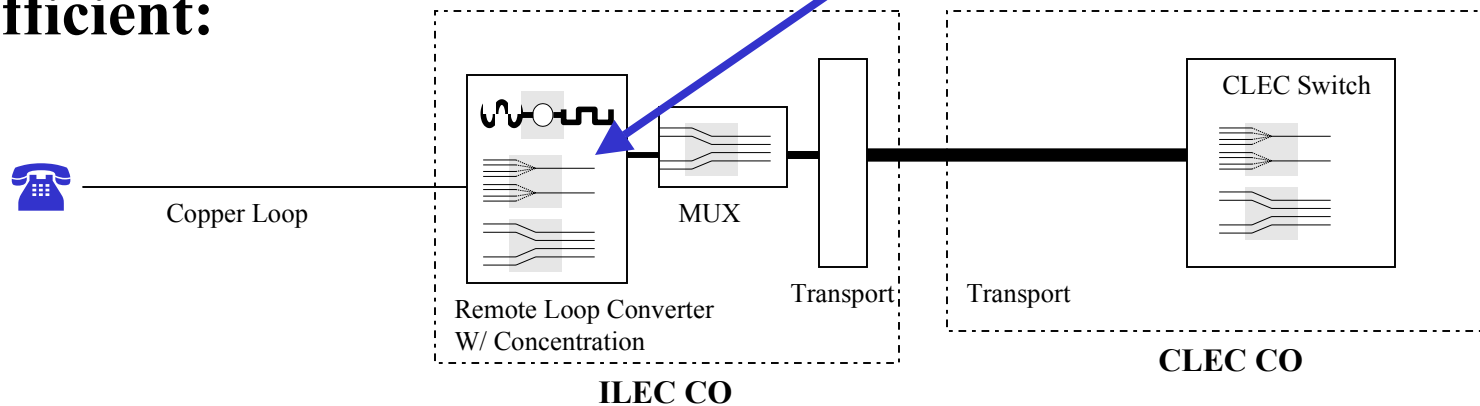


Efficient voice networks employ both concentration and multiplexing as close to the end-user as economically feasible.

Inefficient: (e.g. Foreign Exchange Service)

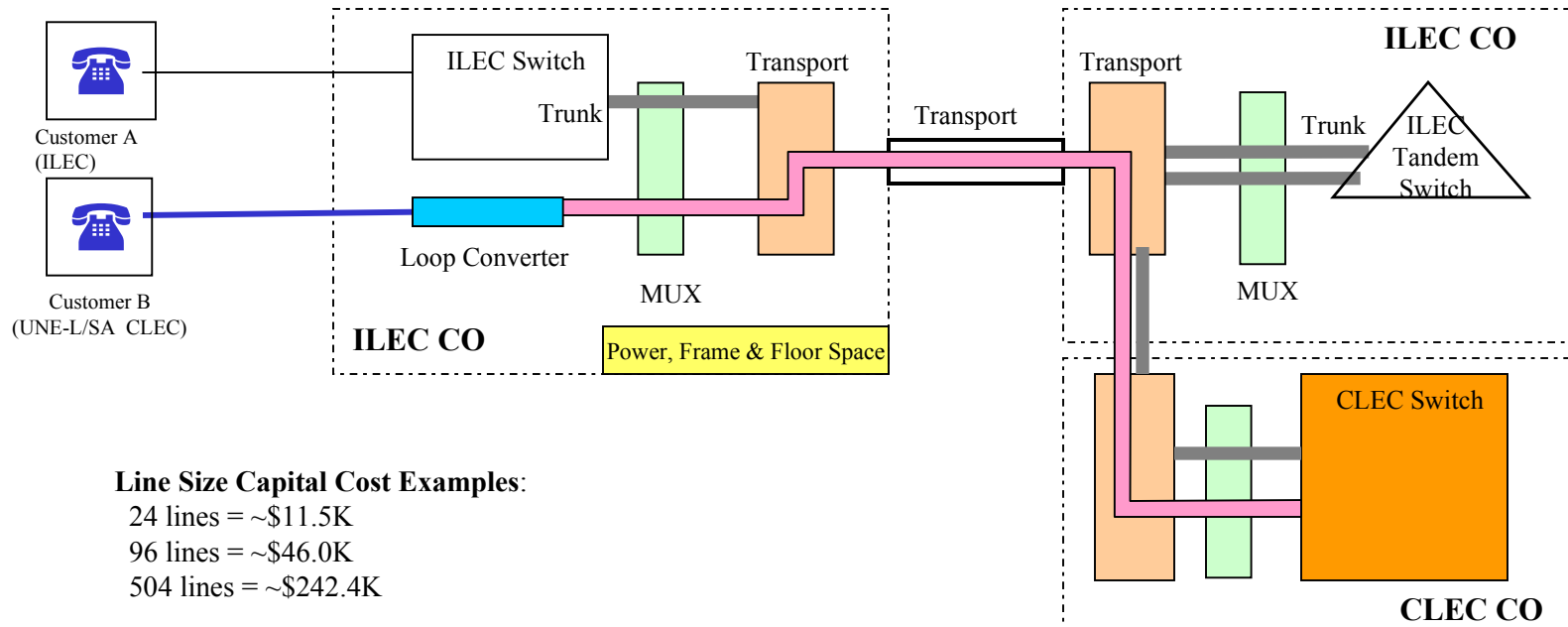


Efficient:



UNE-L/Special Access

- If SBC were required to transition UNE-P lines and provide loop conversion without concentration, the estimated capital investment is approx. \$480 per line.



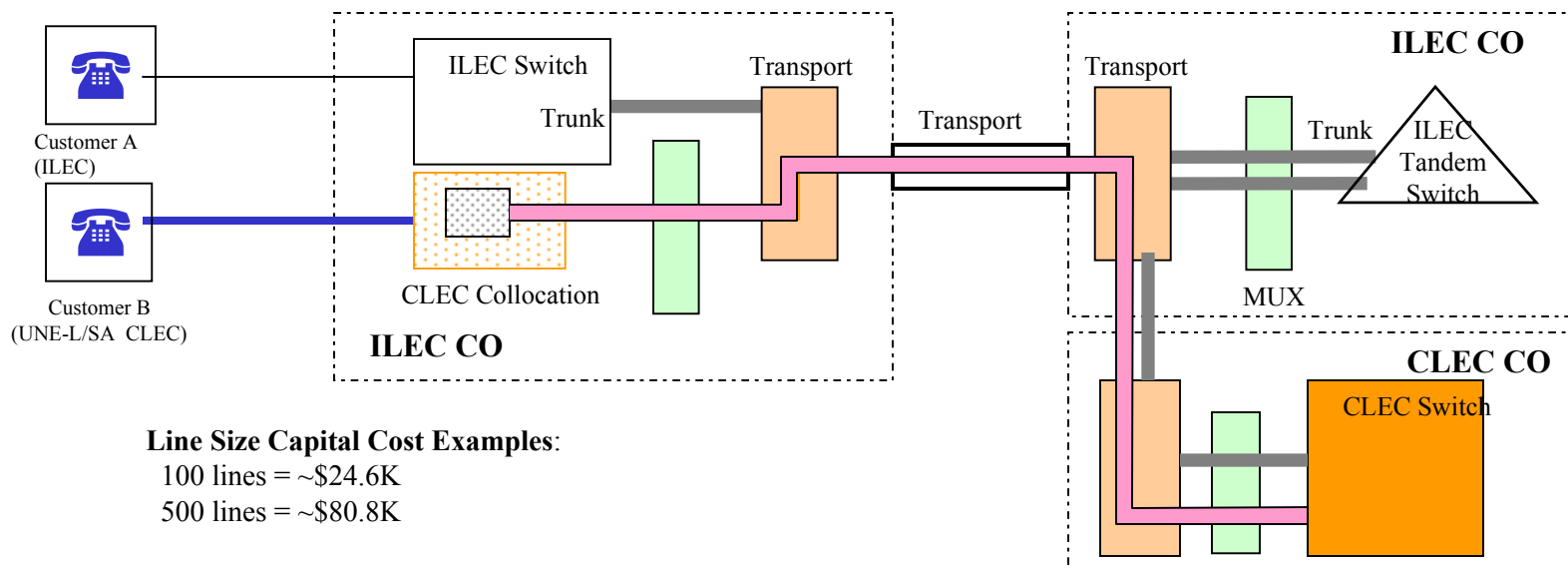
Line Size Capital Cost Examples:

24 lines = ~\$11.5K
 96 lines = ~\$46.0K
 504 lines = ~\$242.4K

Network Component	Capital per Line	
	Model	2-Office Sample
Loop Converter	\$400	\$484
MUX	\$48	\$8
Transport Link	\$31	\$5
Inter-Office Trunk Port + Facility Augment (est.)	not modeled	not modeled
Power, Frame & Floor Space	not modeled	\$52
Total	\$479	\$549

UNE-L/Special Access with Concentration

- CLEC-deployed, collocated, concentration offers greater efficiencies and reduced cost.



Line Size Capital Cost Examples:

100 lines = ~\$24.6K

500 lines = ~\$80.8K

Capital per Line	
Network Component	Virtual Collo Model
CLEC Equip (100 lines)	\$150
Collocation (Physical & Virtual vary by state)	\$75
MUX	\$12
Transport Link	\$9
Inter-Office Trunk Port + Facility Augment	NA
Total	\$246

Conclusions

- **It's reasonable, efficient and practical for CLECs to purchase loop concentration equipment for use in their network.**
- **If an ILEC should deploy new equipment to support UNE-L/SA, then the ILEC should be able to recover costs up-front.**